Wind Energy in Massachusetts: 2,000 MW by 2020



Massachusetts wants wind energy to play a significant role in its clean energy future, both offshore and land-based. Governor Deval Patrick has committed Massachusetts to a goal of installing 2,000 MW of wind energy before 2020 as part of his plan to increase our supply of renewable energy, reduce our greenhouse gas emissions, and make Massachusetts a global leader in clean energy. Massachusetts contains significant wind energy potential, including at least 6,000 MW of offshore wind. Our unique combination of an innovative private sector, world class academic institutions, and aggressive government policies to support clean energy make Massachusetts an attractive place for wind energy. All of the resources, legislation, and organizations listed below will help you achieve success in developing wind energy in Massachusetts and we welcome you to join us in advancing wind energy in Massachusetts.

Resources

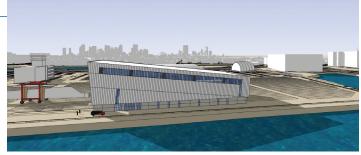
Commonwealth Wind

The Massachusetts Renewable Energy Trust's Commonwealth Wind initiative will provide an overarching framework to expand investments for wind energy installations in Massachusetts. The three types of projects listed below could qualify for technical and/or financial assistance:

- 1. Commercial scale projects that primarily serve wholesale markets
- Community-scale projects in the 100 kW to approximately2 MW range where the project sponsor and primary beneficiary is a private company or organization, a municipality, or a government agency, and
- 3. Small-scale projects under 100 kW serving residential, small commercial, or institutional buildings.

Wind Technology Testing Center

The Massachusetts Clean Energy Center is partnering with the U.S. Department of Energy's National Renewable Energy Laboratory to develop a world-class large wind turbine blade testing center in Boston. The Commonwealth's Wind Technology Testing Center (WTTC) will offer a full suite of certification tests for turbine blades up to 90m in length. WTTC will deliver highest quality, on-time test results for large wind turbine blades and NREL will provide technical expertise to WTTC. The Center will also offer the latest wind turbine blade testing and prototype development methodologies in order to help the wind energy community deploy the next generation of land-based and offshore wind



Rendering of the WTTC

turbine technologies. WTTC is uniquely positioned on an existing deep-water port (all large blades can be shipped via water to this site) and near interstate highways. In addition, WTTC is close to research and academic centers and only 15 minutes from Boston Logan International Airport.

Online Wind Viewer

The Massachusetts Geographic Information System hosts an online wind viewer geared towards facilitating the identification of locations suitable for wind energy. Users can review a variety of characteristics (wind speed, distance to airport, environmental issues, etc.) for any site of interest within Massachusetts.

Model Wind Bylaw

The Massachusetts Department of Energy Resources has developed a model wind bylaw that municipalities can utilize to facilitate wind energy project development. DOER also manages the Green Communities Program which provides benefits for towns that adopt clean energy initiatives including an as-of-right wind zoning bylaw.





RENEWABLE ENERGY TRUST

Legislation

Governor Patrick recently signed new laws to help make Massachusetts a leader in the renewable energy industry.

Green Communities Act

Massachusetts is remaking the electricity marketplace to favor efficiency over additional power generation, supporting the use of renewable energy. This act also mandated the creation of a siting commission that will develop recommendations for streamlining zoning for wind energy and other forms of renewable energy.

Green Jobs Act

This bill authorizes \$58 million in funding and grants to help support development of the green energy technology industry in Massachusetts. It also mandated an analysis of the potential for renewable energy on state owned lands. This analysis identified 44 locations and 947 MW of potential wind energy on state owned lands.

Oceans Act

The Oceans Act, which requires the development of a first-in-the-nation comprehensive management plan for Massachusetts's state waters, allows for the development of wind, wave, and tidal power as part of a plan that balances new and traditional uses with preservation of natural resources.

Global Warming Solutions Act

Massachusetts is a leader in climate protection by requiring the reduction of greenhouse gas emissions by 80% from 1990 levels by 2050.

Clean Energy Biofuels Act

The Clean Energy Biofuels Act gives preferential tax treatment to non-corn-based alternatives to ethanol, requires bio-fuel content in all the diesel and home heating fuel sold in the state, and proposes a new fuel standard for the region that will encourage a range of emissions-reducing technologies for cars and trucks.

Organizations

Massachusetts Executive Office of Energy & Environmental Affairs (EEA): www.mass.gov/eea

Massachusetts Department of Energy Resources (DOER): www.mass.gov/doer

Massachusetts Clean Energy Center (CEC): www.masscec.com

Massachusetts Renewable Energy Trust (MRET): www.masstech.org/renewableenergy

Wind Technology Testing Center (WTTC): www.masstech.org/wttc

The US Offshore Wind Collaborative (USOWC): www.usowc.org

Massachusetts Office of Business Development (MOBD): www.mass.gov/mobd

The University of Massachusetts Amherst Wind Energy Center (WEC): www.umass.edu/windenergy

25-MW Arklow Bank Offshore
Wind Power Facility, Ireland.
Massachusetts is actively
pursuing offshore wind

development options.

The University of Massachusetts Dartmouth Advanced Technology and Manufacturing Center: www.atmc.umassd.edu

Please contact The Massachusetts Department of Energy Resources (DOER) at 617-626-7300 or doer.energy@state.ma.us.





